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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|--------------------------------|----------------------|---------------------|------------------|
| 10/673,665 | 09/30/2003 | Philippe Diehl | 003921.00139 2038 | |
| 22907 RANNER & W | 7590 06/04/2007 VITCOFF LTD | | EXAMINER | |
| BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051 | | | CHRISS, ANDREW W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2609 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 06/04/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|--|---|--|--|--|
| | 10/673,665 | DIEHL ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Andrew Chriss | 2609 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | Lely filed the mailing date of this communication. C (35 U.S.C. § 133). | | | |
| Status | | | | | |
| Responsive to communication(s) filed on <u>30 Seconds</u> This action is FINAL . 2b) ☑ This Since this application is in condition for allower closed in accordance with the practice under Experiments. | action is non-final. | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 1-27 are subject to restriction and/or expected. Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acceptable and acceptable are subjected to by the examine acceptable and acceptable are subjected to by the examine acceptable and acceptable are subjected to by the examine acceptable are subjected to by the examine acceptable and acceptable are subjected to by the examine acceptable and acceptable are subjected to by the examine acceptable ac | vn from consideration. election requirement. r. epted or b) objected to by the B | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ate | | | |

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DETAILED ACTION

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Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4, 9-14, and 20-24, drawn to integrated circuits for generating, transmitting, receiving, and extracting messages containing a plurality of signals, classified in class 370, subclass 535
 - II. Claims 5-8 drawn to a method for determining criticalness of each of a plurality of signals, preparing a signal inclusion schedule, and sending the plurality of signals, classified in class 370, subclass 395.42
 - III. Claims 15-18, drawn to a method for determining criticalness of each of a plurality of signals, preparing a signal inclusion schedule, and receiving the plurality of signals, classified in class 370, subclass 395.42
 - IV. Claim 19, drawn to a method for transferring multiple signals over a single interconnect, classified in class 370, subclass 537
 - V. Claims 25-27, drawn to an interconnected integrated circuit for routing data, classified in class 370, subclass 389.
- 2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process

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as claimed can be practiced by another materially different apparatus, such as a device that does not require the storage and circuitry claimed in Invention I.

- 3. Inventions I and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another materially different apparatus, such as a device that does not require the storage and circuitry claimed in Invention I.
- 4. Inventions I and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another materially different apparatus, such as a device that does not require the storage and circuitry claimed in Invention I.
- 5. Inventions I and V are directed to related products. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants.

 See MPEP § 806.05(j). In the instant case, the inventions as claimed can have a materially different function; specifically, one invention performs multiplexing functions and one invention performs routing. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

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6. Inventions II, III and IV are related as subcombinations (II and III) disclosed as usable together in a single combination (IV). The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as sending the multiplexed data. Subcombination III has separate utility such as receiving the multiplexed data. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

- 7. Inventions II and V are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another materially different apparatus, such as a multiplexer.
- 8. Inventions III and V are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to

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practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another materially different apparatus, such as a multiplexer.

- 9. Inventions IV and V are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another materially different apparatus, such as a multiplexer.
- 10. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
- 11. Due to the complexity of the restriction requirement, a telephone call was not made to Banner & Witcoff, Ltd on 5/2/2007 to request an oral election to the above restriction requirement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Chriss whose telephone number is 571-272-1774. The examiner can normally be reached on Monday - Friday, 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on 571-270-1202. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Chriss Examiner Art Unit 2609

AC

CHARLES D. GARBER
SUPERVISORY PATENT EXAMINER